ΑD	

Award Number: DAMD17-02-C-0078

TITLE: Community Hospital Telehealth Consortium

PRINCIPAL INVESTIGATOR: Elton L. Williams Jr., CPA, CHE

CONTRACTING ORGANIZATION: Lake Charles Memorial Hospital

Lake Charles, LA 70601

REPORT DATE: April 2003

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command

Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;

Distribution Unlimited

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 074-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Security of the data needed, and completing and reviewing this collection of information. Security of the data needed, and completing and reviewing this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503

1.	AGE	NCY	USE	ONLY		
(Leave blank)						
			•			
4	TITI	F At	ID SI	IRTITI	i	

2. REPORT DATE April 2003

3. REPORT TYPE AND DATES COVERED

Annual (1 Apr 2002 - 31 Mar 2003)

AND SUBTITLE

Community Hospital Telehealth Consortium

5. FUNDING NUMBERS DAMD17-02-C-0078

6. AUTHOR(S)

Elton L. Williams Jr., CPA, CHE

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Lake Charles Memorial Hospital Lake Charles, LA 70601

8. PERFORMING ORGANIZATION REPORT NUMBER

E-Mail:

sverren@lcmh.com (attn. Elton Williams)

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)

U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012

10. SPONSORING / MONITORING **AGENCY REPORT NUMBER**

11. SUPPLEMENTARY NOTES

Original contains color plates: All DTIC reproductions will be in black and white.

12a, DISTRIBUTION / AVAILABILITY STATEMENT

Approved for Public Release; Distribution Unlimited

12b. DISTRIBUTION CODE

13. ABSTRACT (Maximum 200 Words)

The Community Hospital Telehealth Consortium is a unique, forward-thinking, community-based healthcare service project organized around 5 not-for-profit community hospitals located throughout Louisiana and Mississippi. The central tenet of the CHTC project is the utilization of TeleHealth technology to improve and expand the opportunity for rural and urban underserved populations to receive quality, affordable health care. The CHTC's goals are to improve quality of and access to health care, to reduce system costs without jeopardizing outcomes, to position Louisiana and Misssissippi for the emerging domestic marketplace, and to position Louisiana and Mississippi for the international marketplace. Considerable progress has been made in the first year of the project through our Telepsych and Ocular Plastics Telemedicine Clinics. A Contract with a rural Correctional institution has been established, and a Cardiology Clinic will begin after equipment installation. School Clinics have been established, connecting school nurses and students with medical residency doctors, raising the level of care available.

14. SUBJECT TERMS

CHTC-Community Hospital Telehealth Consortium

15. NUMBER OF PAGES

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT

Unclassified

18. SECURITY CLASSIFICATION OF THIS PAGE

Unclassified

19. SECURITY CLASSIFICATION OF ABSTRACT

Unclassified

20. LIMITATION OF ABSTRACT

Unlimited

FOREWORD

Opinions, Interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the U.S. Army.
() Where copyrighted material is quoted, permission has been obtained to use such material.
() Where material from documents designated for limited distribution is quoted, permission has been obtained to use the material.
() Citations of commercial organizations and trade names in this report do not constitute an official Department of the Army endorsement or approval of the products or services of these organizations.
() In conducting research using animals, the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals," prepared by the Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Animal Resources, National Research Council (NIH Publication No. 86-23, Revised 1985).
() For the protection of human subjects, the investigator(s) adhered to policies of applicable Federal Law 32 CFR 219 and 45 CFR 46.
() In conducting research utilizing recombinant DNA technology, the investigator(s) adhered to current guidelines promulgated by the National Institutes of Health.
Frincipal Investigator's Signature Date

Table of Contents

Cover	1
SF 298	2
Foreword	3
Table of Contents	4
Introduction	5
Body	6
Key Research Accomplishments	
Reportable Outcomes	8
Conclusions	10
References	
Appendices	11

Introduction

The Community Hospital TeleHealth Consortium (CHTC) is a unique, forward-thinking, community-based healthcare service project organized around 5 not-for-profit community hospitals located throughout Louisiana and Mississippi. These hospitals are

- Lake Charles Memorial Hospital, Lake Charles, Louisiana
- Our Lady of Lourdes Regional Medical Center, Lafayette, Louisiana
- Our Lady of the Lake Regional Medical Center, Baton Rouge, Louisiana
- Slidell Memorial Hospital, Slidell, Louisiana
- North Mississippi Health Services, Tupelo, Mississippi

This multi-hospital collaboration breaks from the traditional structure of a TeleHealth network, giving the CHTC a unique diversity, which is its greatest strength. Each of the five project member hospitals has developed its own individual network with several satellite sites and a specialty focus based on specific regional needs.

BODY

The Community Hospital Telehealth Consortium is made up of 5 Community Hospitals in Louisiana and North Mississippi. Each hospital is a hub site and has developed spoke sites in its respective region in order to meet the unique needs of the community it serves.

Following is a description of the networks developed in each region.

- Lake Charles Memorial Hospital serves as the lead agency, coordinating the
 efforts of the entire consortium and overseeing the distribution of grant funds and
 the collection of outcomes. LCMH is a multi-specialty hospital with 362 beds
 and 300 physicians on staff that provides psychiatry consults to Leesville
 Developmental Center and Southwest Louisiana Developmental Center, provides
 cardiology consults to Phelps Correctional Center, serves as a referring site for
 ocular plastics and provides distance-learning opportunities.
- Our Lady of the Lake RMC is a multi-specialty facility with 852 beds and 300
 physicians that provides distance-learning opportunities, specialty consults to the
 Scotlandville Clinic, serves as a hub for home health consults and provides
 distance learning and clinical applications to St. Joseph's Academy.
- Our Lady of Lourdes RMC is a multi-specialty facility with 293 beds and 420
 physicians that serves as a hub for administrative meetings, continuing medical
 education, community health education and distance learning for Abbeville,
 Church Point, Crowley, Eunice and New Iberia.
- Slidell Memorial Hospital is a multi-specialty facility with 182 beds and 279
 physicians that serves as a hub site for specialty consultations for the Picayune
 Family Practice Clinic and for medical and community health education and
 distance learning.
- North Mississippi Health Services is a multi-specialty facility with 650 beds and 300 physicians that serves as a consulting site for general health screenings, clinics, home health care, and education for school-based telehealth.

The CHTC finds that as it nears one year into the contract period it has made significant progress towards the deliverables established in the project proposal. The following is a progress report on each specific deliverable proposed:

- 2.1 Telemedicine clinics serving a minimum of five (5) patients per month including the following specialties:
 - TelePsychiatry—Lake Charles Memorial Hospital is providing regularly scheduled Telepsych Clinics to Leesville Developmental Center and Southwest Louisiana

Developmental Center. 44 patients have been served in this clinic, averaging 4.4 encounters/month. Referring and consulting providers are satisfied with outcomes and may expand into the correctional setting.

- TeleCardiology—Lake Charles Memorial Hospital has negotiated a contract with Phelps Correctional Facility for the provision of Telecardiology in the correctional setting. Equipment installation is being scheduled at this time.
- Perinatology—At this time there is a disagreement between the referring and consulting providers on the nature of the connections for this clinic. This clinic will require further negotiations to move forward.
- Home Health—A project was piloted by North Mississippi Health Services using telehealth technology to manage Congestive Heart Failure patients at home. The project assessed and noted successes in clinical, humanistic, and financial outcomes. Our Lady of Lourdes Regional Medical Center is exploring a telehealth home health project at this time. Our Lady of the Lake Regional Medical Center is setting up home health equipment to follow the treatment of wound care patients.
- Ocular Plastics— Lake Charles Memorial Hospital is providing regularly Scheduled
 Ocular Plastics Clinics, connecting local patients with an Ocular Plastics specialist in
 the New Orleans area. They have served 9 patients. Referring and consulting
 providers are satisfied with clinic outcomes, and patients consistently report
 satisfaction, and time and travel costs saved.
- Ophthalmology— This project is still in the planning stages, and has not yet been implemented.
- Family Practice— North Mississippi Health Services has linked with six rural schools and is providing Family Practice consults via this medium.
- Dermatology— Our Lady of the Lake Regional Medical Center has served as the
 referral center for a skin cancer screening done as a pilot program at St. Joseph's
 Academy. A local dermatologist viewed potential skin cancer sites on students. The
 students utilized the derma scope to project images to the physician. The screen was
 an excellent learning tool and extremely successful.

2.2 Telemedicine clinics which address specific needs in rural areas, including

- A rural prison system— A contract with Phelps Correctional Facility has been achieved, and we are now waiting on equipment installation to begin Telecardiology clinics. Some of the pitfalls/challenges encountered in engaging the interest of correctional facilities in Telemedicine are:
 - o Some correctional institution officials are expressing interest, but are hesitant to commit
 - Some correctional facilities have contracts with other providers for face-toface treatment
 - State-wide Regional Hospital/Healthcare Network provides services for free, (we have yet to convince them of cost savings relative to transportation and security)

We are hopeful that once the Phelps Correctional Facility Clinic is in operation, we will have pilot data to present to the other facilities that we have approached.

- A rural school system--North Mississippi Health Services is supplying Telehealth Support to the School Nurse Program in six schools in northeast Mississippi: Belmont, Saltillo, North and South Pontotoc, Plantersville, and Okalona. The school nurse program was started to help improve the health of the children in our region, and in conjunction with the Catch Kids program has had an effect on providing affordable health care to the rural medically under served population. The telehealth system connects the Nurse and student with a medical residency doctor or teaching staff member to help diagnose and provide treatment. Working with the Catch Kids program, medication is prescribed and made available free of charge to young patients who would other wise be unable to pay.
- 2.3 Further expansion of our regional network visibility and ability for further rural outreach by adding at least one (1) new Mississippi hospital to our consortium during the contract period— At this time this goal has not been accomplished.
- 2.4 Any and all funding reporting requested by TATRO— Quarterly reports detailing budget activity have been submitted to date.
- 2.5 All data generated as a result of telemedicine clinics during the contract period—The following demographic data relative to our clinics has been collected and aggregated:

Patient Encounters/Month:

- 2 Quarter 2002: 5.3 pts/mo.
- 3 Quarter 2002: 5.7 pts/mo.
- 4 Quarter 2002: 1.3 pts/mo.
- 1 Quarter 2003: 7.0 pts/mo.

65% of patients are male, 35% are female.

86% of patients are Caucasian, 9% African-American, 5% Hispanic.

82% of encounters have occurred in the Telepsych Clinics, while 18% of encounters have occurred in the Ocular Plastics Clinics.

2.6 All outcomes measured during the contract period.

Distance-learning/Administrative Uses:

Quarter	Non-Clinical Connections	Individuals Served	Sites Served
2 Q 2002	7	107	12
3 Q 2002	17	377	35
4 Q 2002	23	224	47
1 Q 2003	Ž8	268	60

Continuing Education Credits Awarded:

Quarter	CE's Awarded
2 Q 2002	39
3 Q 2002	102
4 Q 2002	193
1 Q 2003	278

CONCLUSION/SO WHAT?

The CHTC is a unique, forward-thinking entity that has made significant strides in achieving its goals over the past year. Telemedicine clinics have been initiated, and improved health outcomes have been achieved. The CHTC hub sites have served local regions, and providers and patients have expressed satisfaction with processes and outcomes. Patients have been evaluated by consulting specialist providers without the negative aspects of travel to metropolitan areas and its associated costs. Distance learning programs have afforded professionals in the outlying/rural communities the opportunity to gain interactive educational benefits previously unavailable without travel. Federal funding in the form of Grants is fundamentally supporting the efforts of communities to build telehealth infrastructure, and to pilot processes that will ultimately improve the access and quality of health care well into the future.

20

6

No. of Sites Served

8

Quarter/YR

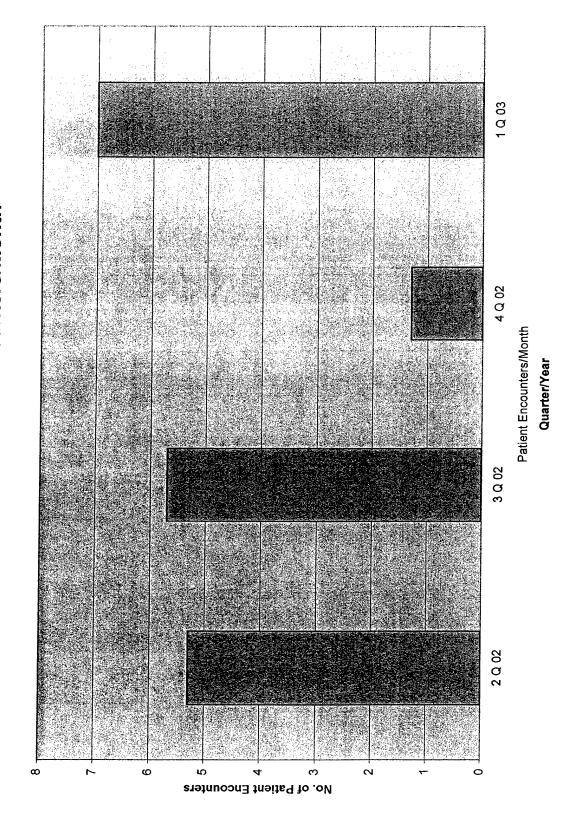
6

Ö

20

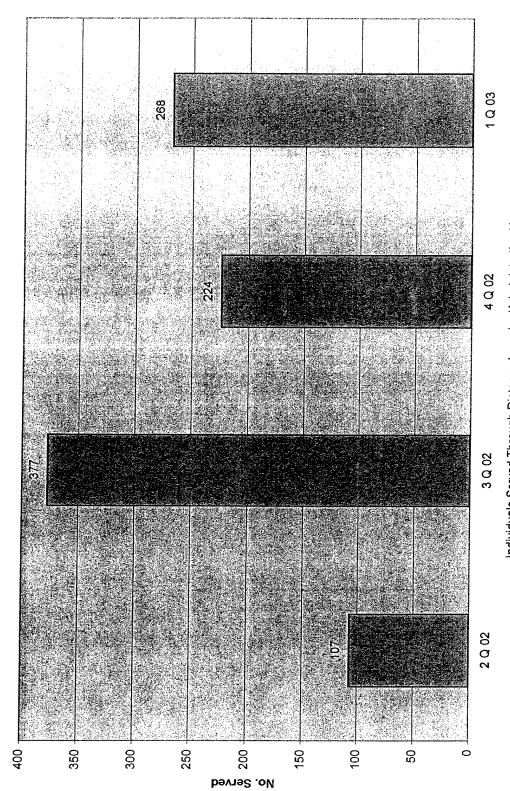
30

CHTC Patient Encounters/Month



CHTC: CE's Awarded

CHTC Individuals Served: Distance Learning/Administrative Uses



Individuals Served Through Distance Learning/Administrative Uses

Quarter/YR

